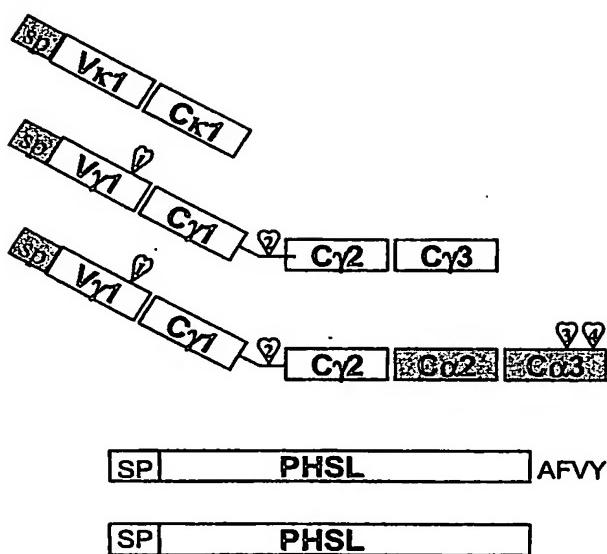
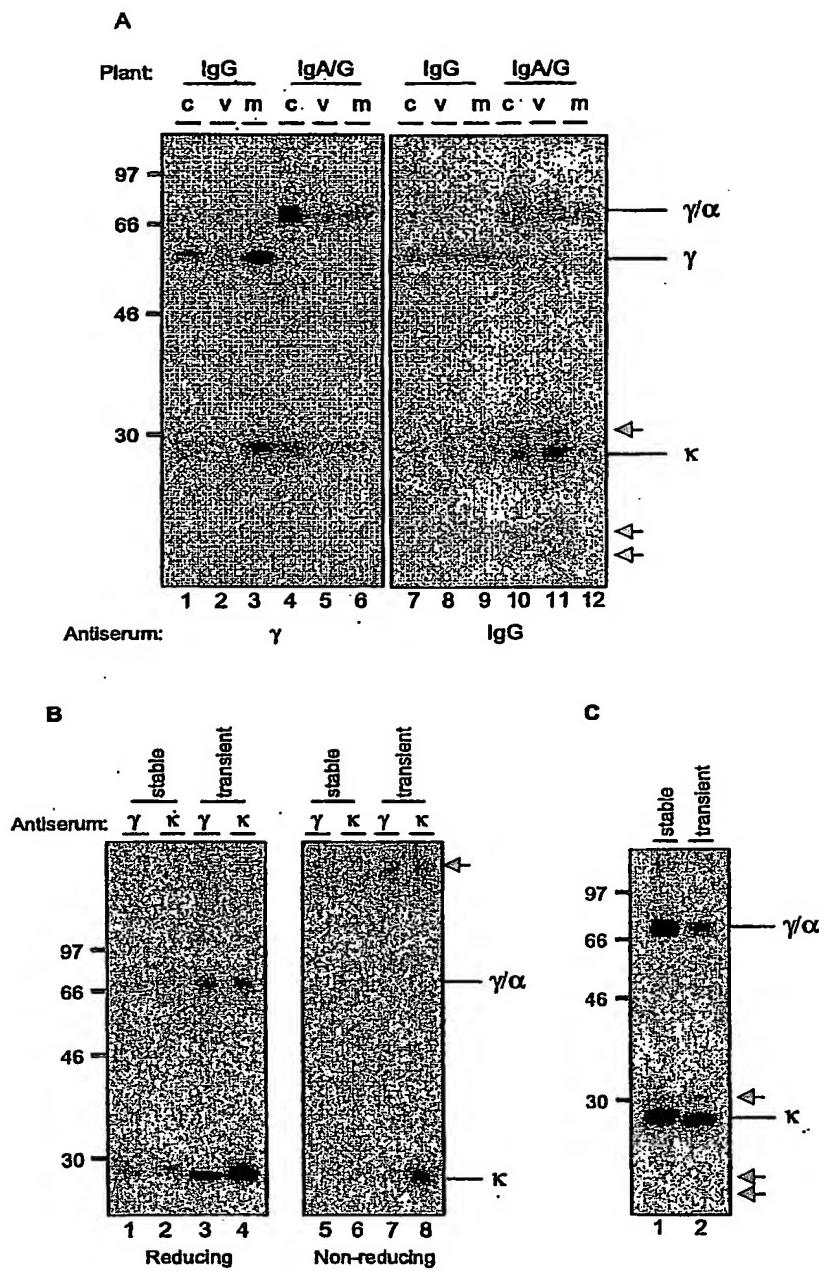


**Figure 1****κ light chain****IgG γ heavy chain****IgA/G γ/α heavy chain****T343F phaseolin****Δ418 phaseolin**

**Figure 2**

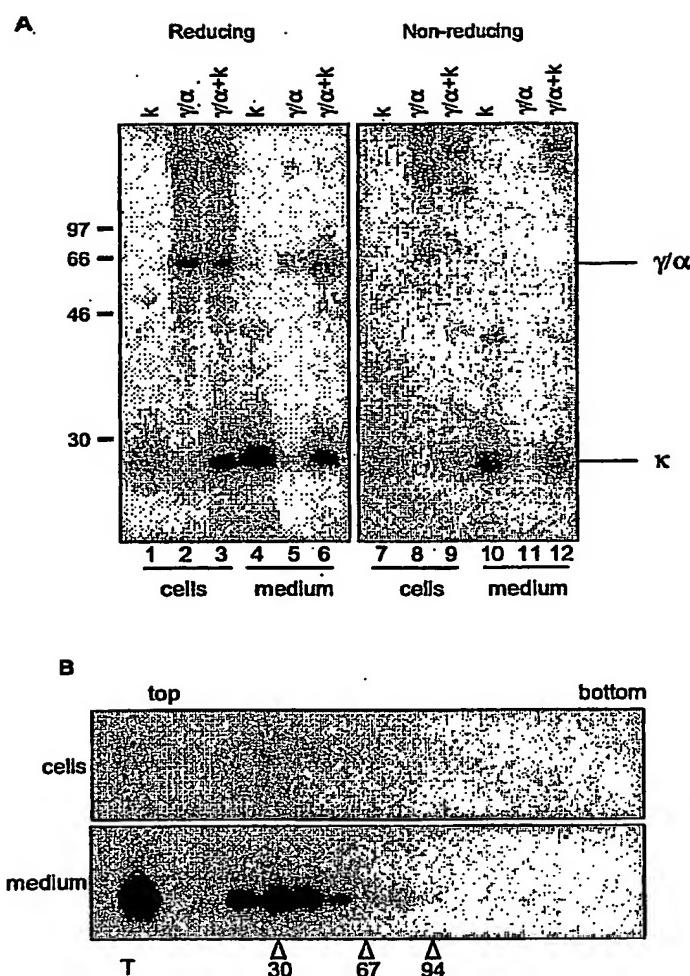
**Figure 3**

Figure 4

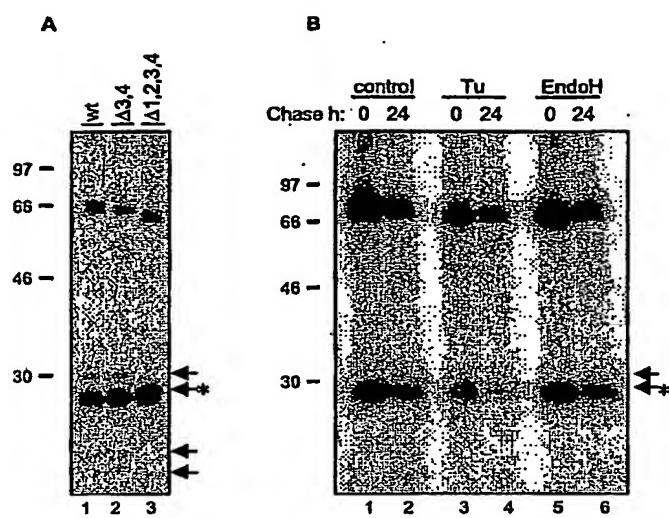
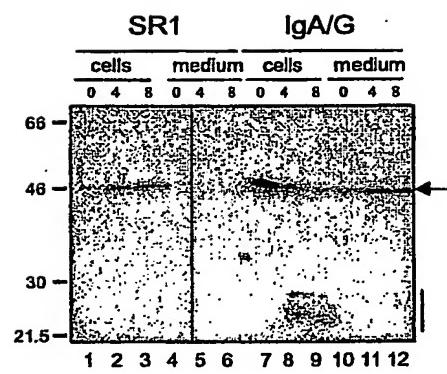


Figure 5



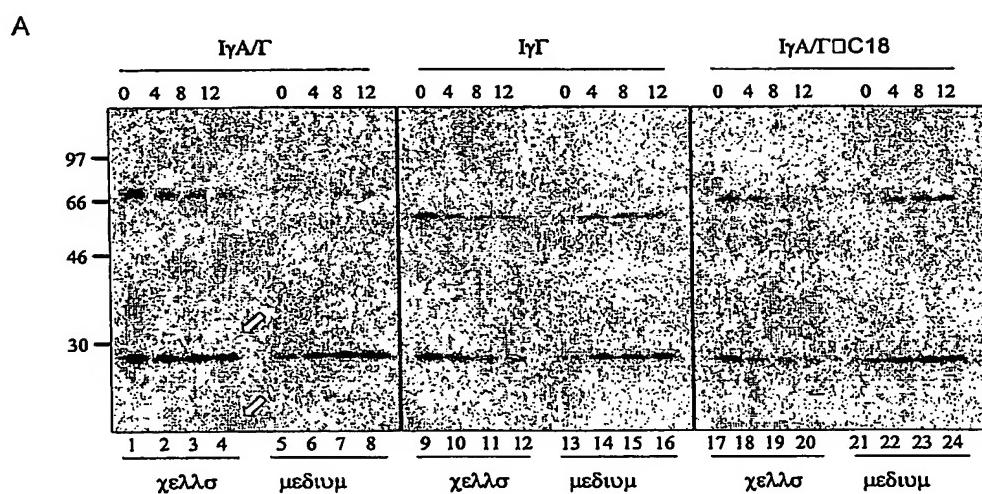
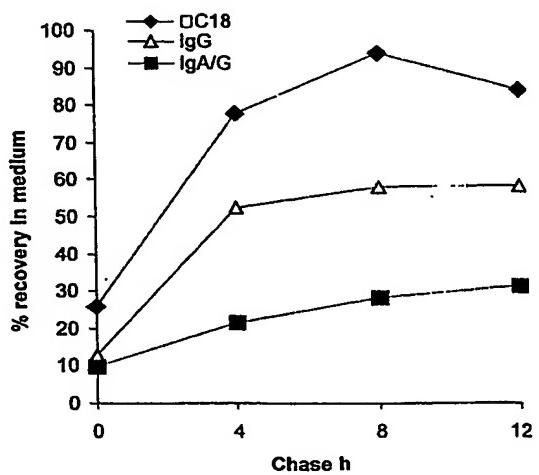
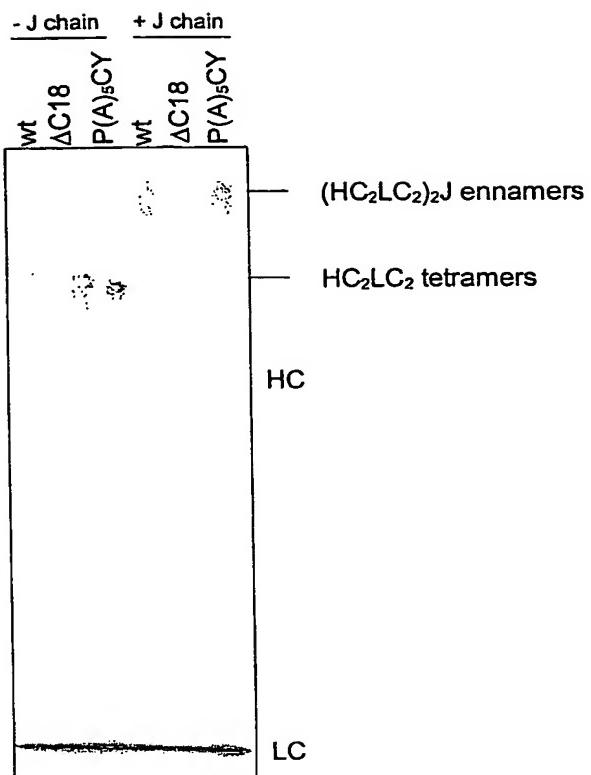
**Figure 6****Figure 7****B**

Figure 8

1 SWALL: <u>ALC MOUSE</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
2 SWALL: <u>Q9DCD9</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
3 SWALL: <u>Q91WP5</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
4 SWALL: <u>Q99M22</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
5 SWALL: <u>Q91XB1</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
6 SWALL: <u>AAH29188</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
7 SWALL: <u>Q91WT1</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
8 SWALL: <u>Q91WT3</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
9 SWALL: <u>Q8VCV5</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
10 SWALL: <u>Q91X92</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
11 SWALL: <u>AAH28249</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
12 SWALL: <u>Q8VEAO</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
13 SWALL: <u>Q99LA6</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
14 SWALL: <u>Q91Z07</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
15 SWALL: <u>Q99KA4</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
16 SWALL: <u>Q91WR1</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
17 SWALL: <u>AAH31703</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
18 SWALL: <u>Q8VCX4</u>	100.0%	IDRLSGKPTNVSVSVIMSEGDGICY
19 SWALL: <u>ALC2 HUMAN</u>	72.0%	IDRLAGKPTHVNVSVVMAEVDGTCY
20 SWALL: <u>ALC1 GORGO</u>	72.0%	IDRLAGKPTHVNVSVVMAEVDGTCY
21 SWALL: <u>ALC1 HUMAN</u>	72.0%	IDRLAGKPTHVNVSVVMAEVDGTCY
22 SWALL: <u>Q9UP60</u>	72.0%	IDRLAGKPTHVNVSVVMAEVDGTCY
23 SWALL: <u>Q9NPP6</u>	72.0%	IDRLAGKPTHVNVSVVMAEVDGTCY
24 SWALL: <u>BAC11114</u>	72.0%	IDRLAGKPTHVNVSVVMAEVDGTCY
25 SWALL: <u>Q96K68</u>	72.0%	IDRLAGKPTHVNVSVVMAEVDGTCY
26 SWALL: <u>Q96KX8</u>	72.0%	IDRLAGKPTHVNVSVVMAEVDGTCY
27 SWALL: <u>Q96DK0</u>	72.0%	IDRLAGKPTHVNVSVVMAEVDGTCY
28 SWALL: <u>Q8WY24</u>	72.0%	IDRLAGKPTHVNVSVVMAEVDGTCY
29 SWALL: <u>AAH32249</u>	72.0%	IDRLAGKPTHVNVSVVMAEVDGTCY
30 SWALL: <u>Q9BRV0</u>	72.0%	IDRLAGKPTHVNVSVVMAEVDGTCY
31 SWALL: <u>ALC RABIT</u>	56.0%	IDRLAGKPTHVNVSVVVAEVKAVCY
32 SWALL: <u>MUC MESAU</u>	56.0%	VDRSTGKPTLYNVLIMSDRAGGT CY
33 SWALL: <u>MUC MOUSE</u>	52.0%	VDKSTGKPTLYNVLIMSDTGGTCY
34 SWALL: <u>Q9BS21</u>	48.0%	VDKSTGKPTLYNVLIMSDTAGTCY
35 SWALL: <u>MUCB HUMAN</u>	48.0%	VDKSTGKPTLYNVLIMSDTAGTCY
36 SWALL: <u>MUC HUMAN</u>	48.0%	VDKSTGKPTLYNVLIMSDTAGTCY
37 SWALL: <u>Q9BQB8</u>	48.0%	VDKSTGKPTLYNVLIMSDTAGTCY
38 SWALL: <u>Q9BU10</u>	48.0%	VDKSTGKPTLYNVLIMSDTAGTCY
39 SWALL: <u>Q96BB9</u>	48.0%	VDKSTGKPTLYNVLIMSDTAGTCY
40 SWALL: <u>MUC CANFA</u>	44.0%	VDKSTGKPTLYNVLULSDTAGTCY
41 SWALL: <u>MUC SUNMU</u>	44.0%	VDKSTGKPTLYNVLULSDTRASTCY
42 SWALL: <u>MUC RABIT</u>	48.0%	VDKSTGKPTLYNVLIMSDTASTCY
43 SWALL: <u>MUC CHICK</u>	40.0%	VDRASGKASAVNVSLVLADSAACCY
44 SWALL: <u>Q8Y0T9</u>	36.4%	--RIGGPPPTGITSDVYL SVYEGVLC-
	consensus/100%	..+ .sG .so .hssslhhu ..tu ..
	consensus/90%	1D+.sGKPT .hsVSLlhhu -ssGh Y

**Figure 9****Figure 10**